

REMARKS

Claims 1-22 were pending in the present application. The applicants respectfully request reconsideration and allowance of the present application in view of the above amendments and the following remarks.

Applicants initially note that the present office action was mailed incorrectly to the previous agent of record. Mailing information of Applicants' new agent is listed in the Revocation and New Power of Attorney and 3.73(b) statement as filed on March 25, 2004 and attached hereto. Applicants respectfully request that this information be immediately updated.

The applicants acknowledge and appreciate receiving a copy of the form PTO-1449 submitted with the Information Disclosure Statement filed on August 31, 2004 on which the Examiner has initialed all listed items.

The Examiner is requested to return an initialed form PTO-1449 in connection with the Supplemental Information Disclosure Statement filed on October 14, 2004. An as filed copy of the PTO 1449 is attached hereto.

Claims 1-22 stand rejected under 35 U.S.C. 103 (a) as being allegedly unpatentable over Black, et al., U.S. Patent No. 6,377,561 B1 (hereinafter "Black") in view of Berman, et al., U.S. Patent No. 6,091,934 (hereinafter "Berman"). The rejection is respectfully traversed.

While applicants note that a new primary reference has been applied, e.g. Black, Berman is still cited as allegedly teaching aspects of the claimed invention carefully addressed in previous responses. Accordingly, applicants will attempt to more clearly delineate the reasons why Berman is deficient. Applicants earnestly request that, in the spirit of the Request for Continued Examination under 37 C.F.R. 1.114, the Examiner carefully re-consider the applicants' arguments with regard to Berman and, if necessary provide more detailed support as to what features are alleged to amount to the claimed features. In short, applicants respectfully

submit that dynamic adjustment of a power supply to an amplifier does not amount to gating as claimed.

Applicants do not believe that, at the present stage in prosecution, simply citing the same lengthy sections of Berman in support of the rejections for independent claims 1, 10, and 18 sufficiently supports the continued rejection and does not address, for example, the differences in the recitations in claims 1, 10, and 18 with regard to, for example, power gating. Simply asserting that features are taught and providing cited sections of Berman does not adequately consider applicants' careful analysis of other sections of Berman which support the contention that Berman fails to teach the claimed features. In an attempt to narrow the remaining issues, Applicants have presented increasingly refined arguments in support of the contention that Berman fails to teach or suggest the claimed features and respectfully requests that, particularly in view of the additional time and expense incurred to extend prosecution, the Examiner state why Berman is believed to teach claimed features such as power gating, and exactly what features of Berman are believed to amount to the claimed features. It is well established that applicants are entitled to know with specificity, what features of the applied references are being considered as amounting to which features of the claims. Applicants hereinafter will concisely summarize why Berman, and thus the applied art combination, fails to teach or suggest power gating as claimed and will further specifically address each independent claim.

Berman, at best, controls *the supply voltage* to various channels of power amplifier 22 based on a calculated sum of the total power requirements of each channel. ***Berman provides no gating or control of signals in the signal path.*** A review of Figure 6 of Berman, and the attendant description, reveals that in steps 50 and 56 for example, scaled reference voltages are applied to reference terminals 26a and 26b of power supplies 28a and 28b, which output a supply voltage V_s 30a and 30b to respective channel amplifiers 22a and 22b. As the reference levels

change, more or less supply voltage V_s is available for signal transmission on the particular channel and in the overall system. However it is crucial to note that in the dynamic power allocation system of Berman, ***there is no control over the waveform***, only the supply voltage to the power amplifier. In other words, Berman performs no gating since control of the supply voltage is not in the signal path. Thus, ***Berman and the applied art combination fail to describe power gating in the manner claimed.***

Gating in accordance with the present invention will be understood by those of skill in the art, particularly when read in light of applicants' specification, for example, beginning at page 31 line 9 in connection with the description of Figure 12, as the inhibiting of at least a portion of the waveform. Gating results in at least an entire portion of a waveform being inhibited from transmission regardless of the power supplied to the amplifier. Even with an expansive reading of the language claim 1 on the description in Berman, ***the adjustment of power supply voltages cannot be fairly said to amount to gating in the manner claimed.***

Further, again even assuming an expansive reading, Berman's adjustment of supply voltage to a power amplifier cannot ***remove RF power from at least a portion of the waveform***, thereby reducing DC power consumption of the power amplifier. Berman has no active gating control over portions of the waveform. Berman's power control circuit, at best, only calculates a sum of total power requirements for signals on the channels in the transmitter and adjusts the voltage supplied to the amplifier for each channel according to the needs of the particular channel or, alternatively, instead of a calculated sum, a command reference voltage can be supplied. In theory, Berman simply makes more or less power supply voltage available to amplifiers on channels requiring more or less power respectively. The objective of Berman's dynamic allocation system is that a high traffic demand on one channel should have no net effect on the actual RF waveform from that channel or any other channel.

With regard to claim 10, a method is recited including power gating at least a portion of the frame signal, prior to transmission, in response to a power gating signal. Here, a portion of the frame signal is power gated in response to a power gating signal. For the reasons set forth above, it is clear that Berman fails to describe gating any signals whatsoever. In support of the rejection of claim 10, the identical sections of Berman are cited even though different features are claimed. Berman, again as set forth herein above, simply provides for the adjustment of a supply voltage to an amplifier circuit. It should importantly be noted that in the method of claim 10, the power gating is performed *prior to transmission*, thus, even assuming *arguendo*, that Berman's power supply adjustment amounted to gating, which applicants strongly contend it does not, Berman dynamically adjusts power to the transmit amplifier, e.g. during transmission, and thus necessarily cannot teach power gating *prior to transmission*.

With regard to claim 18, again the identical sections of Berman are cited in support of the rejection even though the language of claim 18 differs from claims 1 and 10 by reciting, *inter alia*, a waveform generator including a modulator. Applicants note that Berman fails to teach or suggest the claimed waveform generator including a modulator for producing a waveform to be transmitted and a power gating input for carrying a power gating signal for removing power from at least a portion of the waveform *before transmission*. Applicant notes that for the reasons set forth immediately above, Berman necessarily fails to teach or suggest removing power from at least a portion of the waveform before transmission since the power supply voltage adjusting circuit adjusts power supply to the transmit amplifier, e.g. during transmission.

Applicants strongly contend that the distinctions noted herein and in previous responses are significant and are entitled to be accorded patentable weight. In particular, the claimed power gating circuit is not a power supply level adjustment circuit as in Berman. Careful consideration of the term "gating", which can be defined as switching from input to output, "to

disable or discontinue [emphasis added]... in response to a predetermined condition”, or the like, as defined, for example, in the U.S.P.T.O.’s Manual of Classification (see, e.g. Class 327/Subclass 365), clearly reveals the significant difference between gating as claimed, and the adjustment of a supply voltage in a power supply as present in Berman.

Accordingly, for at least the reasons set forth hereinabove, a *prima facie* case of obviousness has not properly been established in that the applied art combination fails to teach or suggest, for example, 1) the claimed power gating circuit of claim 1; 2) the claimed power gating prior to transmission of at least a portion of the frame signal of claim 10; and 3) the waveform generator including the modulator for producing a waveform to be transmitted and a power gating input for carrying a power gating signal for removing power from at least a portion of the waveform before transmission of claim 18. Accordingly, the applied art combination fails to teach or suggest all the elements of the claimed invention required. It is respectfully requested that the rejection of independent claims 1, 10, and 18 be reconsidered and withdrawn.

Claims 2-7, 11-15, and 19-22, by virtue of depending from independent claims 1, 10, and 18, are allowable for at least the reasons set forth hereinabove. It is respectfully requested therefore that the rejection of claims 2-7, 11-15, and 19-22 be reconsidered and withdrawn.

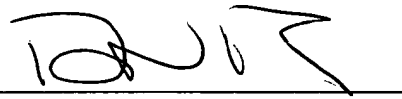
Applicants sincerely believe that the issues have been sufficiently narrowed such that no reasonable reading of the claims can support a contention that the applied art combination and Berman in particular teach, for example, gating as claimed. The Examiner is asked to specifically note the reasons for sustaining the application of Berman and prolonging prosecution, particularly given the weaknesses in the teachings of Berman as compared to the language of the claims. Berman simply does not teach or suggest gating.

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In view of the foregoing, the applicant respectfully submits that the present application is in condition for allowance. A timely notice to that effect is respectfully requested. If questions relating to patentability remain, the examiner is invited to contact the undersigned by telephone.

Please charge any unforeseen fees that may be due to Deposit Account No. 50-1147.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'D. Posz', written over a horizontal line.

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